APPLICATION: A005630 PERMIT: 016478 YEAR: 2010

## Remarks

All data is preliminary and subject to change.

Water diversion and use have been allocated to the individual Permits 16478, 16479. 16481, 16482, and 16483 governing the primary operations of the State Water Project (SWP) consistent with the water rights priorities. However, SWP operations are not segmented by individual permit. The SWP is operated as a single coordinated project consistent with the joint terms and conditions specified in Water Rights Decision 1641 (D1641) and the criteria specified in the biological opinions for the protection of Delta smelt and anadromous fishes. Operations are also coordinated with the U.S. Department of Interior, Bureau of Reclamation consistent with the provisions of the Coordinated Operations Agreement (COA) dated November 24, 1986. The SWP is a large complex project with nearly 700 miles of aqueduct, numerous storage and regulating reservoirs, multiple diversion facilities, and several different water supply sources. Allocating diversion and use to individual permits requires numerous simplifying assumptions due to the substantial geographic distribution of facilities, multiple water sources, numerous rediversion and delivery locations and multiple authorized purposes of use, both consumptive and non-consumptive. In order to allow allocation of diversion and use to individual permits, for purposes of annual reporting, project operations were assumed to be instantaneous at any location throughout the project on any given day. While it is recognized that there is substantial time lag between diversions and releases at Lake Oroville, the Sacramento/San Joaquin Delta and deliveries throughout the SWP, the assumption is necessary to allow allocation of diversion and use to individual permits. The simplifying assumptions used for reporting purposes may result in the introduction of small discrepancies between quantities pumped and diverted to storage on a given day. Summary tables for total SWP operations for all relevant permits are attached to this report. The assumptions used were reviewed by SWRCB staff and are considered sufficient for annual reporting purposes.

The SWP is a large complex water supply system consisting of 29 dams, 30 Item 7: pumping and generating plants and approximately 675 miles of aqueducts. DWR diverts water under its permits for irrigation, industrial, municipal, domestic, incidental power, recreation, salinity control and fish and wildlife enhancement purposes. The SWP delivers water to 29 long-term water supply contractors serving approximately 25 million people and providing irrigation to approximately 750,000 acres of farmland. Recreation opportunities at SWP facilities include boating, fishing, water contact sports, camping, and equestrian among others. DWR generates incidental power under permits 16478, 16479, 16481, and 16482 at the Gianelli, Alamo, Warne, Mojave Siphon, and Devil Canyon powerplants. (total installed capacity 626 MW) Power is also generated by the flows appropriated under the above permits at the Castaic Powerplant owned and operated by Los Angeles Department of Water and Power (1250 MW). Specific information regarding SWP operations and deliveries are contained in DWR Bulletin 132. The Division of Water Rights receives a copy of Bulletin when it is released. It is also available online at http://www.water.ca.gov/swpao/bulletin.cfm.

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Item 8: The quantities shown in Item 8 reflect those diverted under Permit 16478 only. The data contained in the attached tables reflect the overall operation of the SWP and include water use under Permits 16478, 16479, 1648, 16482 and 16483 which authorize use for irrigation, domestic, municipal, industrial, salinity control, recreational and fish and wildlife enhancement purposes, both consumptive and nonconsumptive purposes. The authorized season of diversion to storage at Oroville under Permits 16478 and 16479, September 1 through July 31, does not coincide with the annual reporting period of January 1 through December 31. The calendar year reporting period encompasses portions of the 2010/2011 and 2011/2012 water years. The amount of water put to beneficial use may differ substantially from that diverted in any one month due to a shift in timing of diversion to storage and subsequent release for beneficial use. The period between initial storage and ultimate beneficial use may span multiple calendar years. The season for direct diversion is January 1 through December 31 of each year. The quantities shown in item 8 reflect the water directly diverted or diverted to storage consistent with the terms and conditions of Permit 16478 during each month of calendar year 2011 for all authorized purposes of use. Total diversion to storage in 2011 at Lake Oroville under Permits 16478 and 16479 was 1,550,463 acre-feet.

Item 9: Direct diversion is authorized under Permit 16478 at both the Oroville/Thermalito complex and from the Sacramento San Joaquin Delta channels. The quantities shown reflect diversions at both locations.

Item 10: Water level at minimum storage during 2011 was 13.3 feet below the sill of the gated spillway for Oroville Dam (Elevation 813.60 feet). Water level at minimum storage during the 2010/11storage season was 68.3 feet below the sill of the gated spillway. Water level at maximum storage was 900.1 feet (87.1 feet above the sill of the gated spillway). Normal operating maximum elevation for Oroville Reservoir is 899.0 feet. The SWP reservoirs south of the Delta are built for offstream storage and are operated to avoid spill. Water may be directly diverted from the Delta channels or rediverted from Lake Oroville. Water levels fluctuate substantially throughout the year as DWR diverts or rediverts water to individual reservoirs depending on Project supplies and regional demands.